

3 R D Q U A R T E R - F Y 0 5

2005 Operational Report to Congress

A P R I L - J U N E 2 0 0 5

Highlights

**TVA worked with regional,
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to help attract or retain
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- TVA worked with regional, state, and local officials to help attract or retain 10,054 jobs and leverage investments of more than \$929 million for the region's economy during the quarter. TVA provided economic development loans totaling \$2.3 million to Valley companies through partnerships with distributor customers and communities.
- Operating revenue for the nine months ending June 30 was \$5.554 billion. This was \$41 million higher than the same period last year, reflecting a 1.5-percent increase in kilowatt-hour sales. The increase is primarily related to an increase in off-system sales and sales to industries directly served by TVA. These items were partially offset by a decrease in revenues from municipalities and cooperatives due to a shift in product and customer mix, lower rates for variable priced products, and milder weather.
- Fuel and purchased power costs increased 10.9 percent—from \$1.509 billion to \$1.674 billion—for the nine months ending June 30, 2004 and 2005, respectively. This increase was primarily due to higher coal prices and higher market prices for power bought from other suppliers.
- Net interest expense for the nine months ending June 30 was \$943 million, which is \$42 million lower than the same period last year. The decrease is primarily due to a lower level of long-term outstanding debt.
- TVA held its annual rate review with the Tennessee Valley Public Power Association and distributor customers in June. TVA staff discussed increased costs for coal, natural gas, purchased power, and other expenses. A proposal was made to the Board by the TVA executive staff to increase firm electric wholesale rates to generate about \$524 million in additional revenue in fiscal 2006.
- The reliability of the fossil system continues to improve. For the 12 months ending June 30, unplanned outages and load reductions were the lowest for any 12-month period in the history of the current system of 59 generating units.



**The Nuclear Regulatory
Commission concluded
there are no major
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preclude extensions of the
operating licenses for
Browns Ferry Nuclear Plant.**

- Site preparation has begun to replace the lock at Chickamauga Dam. Congressmen Duncan and Wamp, Senators Frist and Alexander, and Chairman Baxter spoke at the June 18 groundbreaking. Construction on road and utility relocations will begin this summer, and construction on a cofferdam is expected to start in 2008.
- A reliability coordination agreement signed by TVA with the Midwest Independent Transmission System Operator, Inc., and PJM Interconnection will provide for unprecedented cooperation in managing and operating about 45 percent of the Eastern Interconnection transmission grid. The chairman of the Federal Energy Regulatory Commission said the proactive cooperation will help “maximize the benefits of electricity markets.”
- The Nuclear Regulatory Commission has concluded there are no major environmental impacts to preclude granting 20-year extensions of the operating licenses for all three units at Browns Ferry Nuclear Plant.
- Average rainfall for the Tennessee Valley was 88 percent of normal and runoff was 91 percent of normal during the third quarter. Eight of the 10 large tributary reservoirs were above flood guide—the target levels for this time of year—and flood storage space was at 96.8 percent when the quarter began. The quarter ended with three projects below flood guide levels due to supplying downstream flow commitments; four projects were at flood guide levels; and three were slightly above due to rainfall from tropical storm Arlene. Hydro generation for the quarter was 118 percent of normal.

ENERGY

- The highest electricity demand on the TVA system during the quarter occurred on June 30, when the average temperature across the region was 93°F. The demand for 29,756 megawatts was a calendar year-to-date peak and an all-time record for the month of June.
- A milestone for transmission grid reliability was achieved in April with the completion of an expanded transmission monitoring system that encompasses TVA, Associated Electric Cooperative, Big Rivers Electric Corporation, East Kentucky Power Cooperative, Electric Energy, Inc., and LG&E Energy grid operation areas.
- Four fossil units established or extended continuous run records as of June 30:
 - Gallatin Unit 4 extended its record to 402 days.
 - Shawnee Unit 2 extended its record to 434 days.
 - Shawnee Unit 6 extended its record to 499 days.
 - Widows Creek Unit 3 ended its national-record run of 819 days on April 16, when it was removed from service for a planned outage.
- Safety milestones were established when the Power Service Center in Muscle Shoals reached one million work-hours without a lost-time injury; Paradise Fossil Plant reached two million hours; and John Sevier Fossil Plant reached five million hours over 15 years without a lost-time injury. The 15-year record is the longest for any TVA fossil plant.

**TVA Nuclear earned the
Nuclear Energy Institute's
Top Industry Practice Award.**

- An emergency preparedness drill for Browns Ferry Nuclear Plant in June met criteria established by the Nuclear Regulatory Commission to ensure plans are in place to protect the health and safety of the public. About 1,000 staff, officials, and emergency responders from TVA and various federal, state, and local agencies participated in the exercise.
- Refueling outages were completed for Watts Bar Unit 1, Browns Ferry Unit 2, and Sequoyah Unit 2.
- TVA Nuclear earned the Nuclear Energy Institute's Top Industry Practice Award in May for the "Intolerance for Equipment Deficiencies" Index. Work to earn the award has significantly reduced the number and age of equipment deficiencies.
- Work is under way to address public comments gathered in June for a draft Environmental Assessment on a TVA proposal to begin delivering coal to Gallatin Fossil Plant in middle Tennessee by rail instead of barge.
- The Clarksville, Tennessee, Department of Electricity became the first TVA customer to put a Platinum Certified home through the *energy right*® Program. Certification requires that the homes be at least 30 percent more efficient than homes built to the 1993 national Model Energy Code.
- The transmission organization placed four new customer electricity delivery points into service and completed 39 miles of transmission line during the quarter.
- TVA filed its annual report showing full compliance with all applicable measures of the North American Electric Reliability Council reliability standards.
- TVA assisted the Arnold Environmental Developmental Center (a U.S. Air Force facility) in identifying an electrical problem with equipment used to test materials for aerospace reentry.
- The SuperVAR™ Dynamic Synchronous Condenser, jointly developed by TVA and American Superconductor, was selected by *R&D* magazine as one of the 100 most technologically significant products introduced into the marketplace over the past year. The equipment stabilizes grid voltages, increases service reliability, and maximizes transmission capacity.

ENVIRONMENT

- Actions are progressing to further reduce nitrogen oxide (NOx) and sulfur dioxide (SO2) emissions from fossil plants:
 - Two more selective catalytic reduction (SCR) systems began operating this summer, bringing the total to 20. Evaluations are under way on two units using a less-expensive NOx reduction option.

- Scrubbers for Paradise Unit 3 and Bull Run are under construction. The Paradise scrubber is scheduled for operation in 2006, and the Bull Run scrubber will be operational by 2010. Planning is under way for scrubbers on Unit 5 at Colbert Fossil Plant in Alabama and for the nine units at Kingston near Knoxville.
- Test burns of blends of low-sulfur Powder River Basin coal are under way at some plants to determine the plant impacts and mitigation measures needed to burn this type of western coal.
- TVA began mosquito monitoring at 39 sites along Fort Loudoun, Watts Bar, Nickajack, Guntersville, Wheeler, Wilson, Pickwick, and Kentucky reservoirs. Species will be identified and evaluated for West Nile virus, St. Louis encephalitis, and Eastern equine encephalitis viruses.
- TVA is monitoring bacteriological concentrations at 243 swimming beaches, boat ramps, and canoe launches throughout the Tennessee Valley from Memorial Day through Labor Day.
- The spring sport fish surveys of 39 sites on 14 reservoirs were completed and the results will be posted on the TVA Web site. Preliminary observations indicate no noticeable declines.

**Tennessee State Parks
will purchase blocks of
electricity from TVA Green
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park where it is available
from the local utility.**

- The TVA Web site for river information was updated to give the public information about how the reservoirs are operated. Changes included displaying typical operating ranges and the previous year's observed elevations.
- Tennessee State Parks will purchase blocks of electricity from TVA Green Power Switch® for every park where it is available from the local utility. Tennessee is the first state to use green power for its park system. The purchase of 1,149 blocks of green power is equal to planting 418 acres of trees, recycling 8.8 million aluminum cans, or recycling more than a million pounds of newspaper.
- TVA and Invenergy, a Chicago-based energy company, dedicated 15 new wind turbines on Buffalo Mountain near Knoxville in celebration of Earth Day. The turbines are each capable of generating 1.8 megawatts of electricity for TVA's Green Power Switch Program. Currently, 80 local utilities offer the renewable-energy option.
- A month-long air sampling campaign was conducted in Chattanooga to collect data for developing particulate matter control measures for more accurate assessments of human exposure.
- TVA completed the 21-month collection phase of an air quality study at Look Rock near the Great Smoky Mountains National Park. This project, co-funded by TVA, will provide the most comprehensive database on fine particle composition available for the southern Appalachian region.
- TVA Watershed Teams supported six cleanup events across the Valley. About 1,200 volunteers collected more than 54 tons of trash and debris from area reservoirs, streams, parks, roadways, and a greenbelt. The cleanups supported Keep America Beautiful's Great American Cleanup and Earth Day activities.

ECONOMIC DEVELOPMENT

**A contract was signed with
the Ocoee River Outfitters
Association to provide
recreation releases below
Ocoee No. 3.**

- The fourth large industrial site in the TVA service region was certified by McCallum Sweeney Consulting as a potential location for a major auto manufacturing plant. The site near Chattanooga was the first in Tennessee that has been certified through TVA's Megasites economic development initiative. Two sites in Mississippi are certified and one in Kentucky.
- More than 500 government and economic development officials attended the 10th Rural Development Conference in Cookeville, Tennessee, in April. TVA co-sponsored the conference with the U.S. Department of Agriculture's Rural Development and Tennessee Technological University.
- The Business Retention & Expansion International Conference was sponsored in June in Nashville by TVA; Nashville Electric Service; Memphis Light, Gas and Water; and EPB. Recognized for best practices were the Nashville Chamber of Commerce, the Industrial Development Authority of Winston County, the Economic Development Partnership of Alabama, and the Technology 2020 Venture Forum.
- A contract was signed with the Ocoee River Outfitters Association to provide recreation releases below Ocoee No. 3 on Saturdays and Sundays through September 4, and on Saturdays for two additional weekends through September 25, supporting economic development in the region. Negotiations continue on a long-term contract.
- TVA contributed to job growth in the region through economic development work that supported the location or expansion of several businesses and industries:
 - Skyline Steel, LLC, of Parsippany, New Jersey, will build a steel processing plant near Yellow Creek Port in Tishomingo County, Mississippi, that will employ 40 people and have a capital investment of \$17 million. TVA was the lead agency in securing the project.
 - II-VI, Inc., will construct a \$36-million silicon carbide semiconductor substrate plant in Starkville, Mississippi, that will employ 250.
 - 84 Lumber Co. will locate a components manufacturing plant in the Westbridge Business Park in Knoxville. The \$4-million project will create 200 jobs.
 - Brinks Home Security, Inc., will locate an alarm monitoring and customer center in the Pellissippi Corporate Center near Knoxville. The \$12-million facility will employ 350. TVA worked with the Development Corporation of Knox County.
 - Guardian Fiberglass will expand its insulation manufacturing operations in Olive Branch, Mississippi. The company will add two buildings and 75 employees.
 - VFP, Inc., announced an expansion of its manufacturing facility in the Duffield Regional Industrial Park in Virginia. The company employs 102 and plans to add 176 employees and invest \$2.2 million over the next three years.

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- Edwards & Associates, a helicopter services company, announced an \$8-million expansion of its facilities in Bristol, Tennessee, that will add 70 jobs.
- Mohawk Carpet announced the \$33-million expansion of an existing facility in Gordon County, Georgia. TVA provided assistance that helped the company make the decision to retain 485 jobs and add 90 more.
- Thacker Casket Manufacturing will locate a \$4-million facility in Florence, Alabama, that will employ 40 people. TVA provided resources for the project.
- Colormasters, LLC, printing services in Albertville, Alabama, announced a \$3-million expansion that will add 75 jobs. TVA assisted through its Small Manufacturer and Enhanced Growth Credit Program.
- The Topre America plant in Cullman County, Alabama, announced a \$15-million expansion that will add 80 jobs. TVA assisted Topre, a Tokyo-based metal parts supplier for the auto industry, in locating to Cullman.
- Hydro-Gear, which makes lawn tractor transmissions, announced that it will build a plant near Princeton in Caldwell County, Kentucky, that will create 150 jobs.
- Tennessee Bun Co. is expanding production and adding 160 jobs at its Nashville plant after securing a \$20-million contract with McDonald's restaurants. TVA provided a variety of assistance to the woman-owned business.
- Reily Foods, parent company of JFG Coffee, announced a \$12-million expansion of its Knoxville operations. The company cited incentives offered by the city, county, state, and TVA as influencing its decision to expand rather than relocate to New Orleans. The decision creates 16 jobs and retains 160.
- Caremark Rx, Inc., will locate a \$21-million Pharmaceutical Customer Care Center in Nashville. The customer call center will employ 375 and could expand to 600.
- JIT Cylinders announced 40 jobs for its plant in Decatur, Alabama. The project represents an investment of \$2.8 million. TVA provided a variety of assistance for the woman-owned company.
- Denso Manufacturing Tennessee, Inc., will add 100 jobs at its Blount County plant. TVA provided information about power rates, reliability, and assistance programs that demonstrated competitive advantages for the expansion.

CORPORATE

- Distributor customers were informed about audit plans needed for TVA to assess its internal controls as required under the Sarbanes-Oxley Act. TVA must evaluate internal control procedures for end-use billing and provide the information in its fiscal year 2006 Annual Report, which will be filed with the Securities and Exchange Commission.

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- TVA priced two global Power Bonds in June to refinance maturing debt. TVA issued \$500 million of a 30-year global issue with a rate of 4.65 percent, which was the lowest rate ever on a 30-year bond by any U.S. agency or corporate issuer. TVA also issued \$1 billion of a 10-year global issue with a rate of 4.375 percent. Market timing and strong investor demand generated favorable terms for the two bond issues.
- TVA's 1998 Series D Puttable Automatic Rate Reset Securities (PARRS) reset downward from 5.952 percent to a rate of 5.490 percent, which will save TVA about \$2.2 million in annual interest expense. The bonds have a feature that provides for an automatic reduction in the coupon rate under certain conditions.
- TVA opened a \$2.5 billion line of credit in May with a commercial bank to increase liquidity and to provide a backstop for access to capital markets.
- The TVA Retirement System Board allocated \$25 million to the HarbourVest International Private Equity Partners V – Partnership Fund following a quarterly review from the company.
- The use of online reverse auctions to purchase goods and services is saving TVA an estimated \$2.3 million a year. TVA is using the Dynamic Trade Centre, an Internet-based software tool provided by Elcom, Inc., of Boston, to hold 20 to 30 online auctions each year. Distributor customers are eligible to use the service.
- The Employee ID Conversion Project was completed in June, reducing the use of Social Security numbers for employee identification by 99 percent. Personal identification numbers were assigned to employees and contractors, eliminating more than one billion references to Social Security numbers.
- Web-based automated background checks for new employees are being done under a pilot program sponsored by the Department of Homeland Security and the Social Security Administration. Under the pilot program, the checks must be completed within three days of hiring.
- TVA is working with the Dams Government Coordinating Council to identify the top 100 critical hydro facilities in the U.S. as part of the national Critical Infrastructure Protection initiative. TVA is also developing other risk protection plans and integrating aspects of the National Incident Management System into its Agency Emergency Response Plan.

STATE NEWS

ALABAMA

- Stakeholders in North Alabama were briefed about the selection of Bellefonte as one of the six finalist sites in the NuStart project to build a next-generation nuclear plant. NuStart is asking local officials to respond to a Request for Information to determine local interest.

TVA began implementing an aquatic plant management plan developed by stakeholders for Guntersville Reservoir.

- TVA and the Corp of Engineers in Muscle Shoals are discussing plans to replace the Wilson Dam bascule bridge with a new one downstream. The bridge provides access to the lock operations and was a part of the original highway over the dam. The Corps and TVA will share design and construction costs. The project is scheduled to begin in the 2006 fiscal year.
- Repairs made during the winter at Bear Creek Dam reduced seepage through most of the dam's foundation, except in one section. The reservoir will be maintained eight feet below normal summer level while engineering studies are conducted. TVA will notify local authorities and monitor the dam if heavy rains affect the reservoir.
- TVA began implementing an aquatic plant management plan developed by stakeholders for Guntersville Reservoir. The plan allows use of herbicides on 3,000 acres near developed shoreline and mechanical harvesting to maintain 11 miles of boating access lanes in offshore areas.
- Cullman Economic Development Agency was ranked one of the top 10 economic development groups in North America by *Site Selector* magazine after attracting \$153 million in capital investment and 960 jobs during 2004, primarily from manufacturers. The city of 78,000 ranked first in Alabama for industry announcements, second in new jobs, third in new investment, first in industry expansions, and first in total project announcements. The accomplishments earned Cullman the state's first Economic Development Achievement Award.
- TVA approved a loan to finance a speculative building for the new Jackson County Industrial Park. The design will allow marketing to a variety of manufacturing segments. TVA also provided technical assistance for the industrial park.
- A conceptual plan was provided to the city of Sheffield to support its Consumer Connection retail recruitment initiative.
- TVA participated with two local banks in Cullman County to help create and retain 150 jobs at the NAFCO flooring plant.
- Congressional staff from across the Valley toured North Alabama as part of TVA's initiative to acquaint them with different parts of the region. The group visited Redstone Arsenal in Huntsville, the Boeing rocket assembly plant in Decatur, and Browns Ferry Nuclear Plant. Director Harris spoke at a dinner in Huntsville.

GEORGIA

- The Air Quality Toolkit for Elected Officials was unveiled at the annual meeting of the Association of County Commissioners of Georgia. TVA had a leadership role in working with the Environmental Protection Agency to develop the informational kit about air quality issues for local officials.
- Fieldstone Marina became the first marina on Chatuge Reservoir and the first marina in Georgia to receive the Tennessee Valley Clean Marina designation. Fieldstone is the 40th marina certified since the program began in 1999.

- Action plans to improve water quality at Chatuge and Nottely reservoirs are being developed with the Hiwassee River Watershed Coalition.

KENTUCKY

- A workshop on the Consumer Connection program was held for Cadiz/Trigg County officials. The program helps communities promote development of their retail and commercial sectors.
- Following a TVA planning workshop, officials in Allen County are developing a strategic growth plan based on input from the community.
- Discussions were held with officials from the South Kentucky Industrial Development Association to consider the impact of service termination notices submitted by some TVA distributor customers in Kentucky.
- Western Kentucky University opened its Center for Research and Development to support growth of high-tech businesses in the area. The center received funding from TVA and other federal, state, and local agencies.

MISSISSIPPI

- Columbus/Lowndes County Link, Mississippi Development Authority, and TVA organized volunteers who made 38 industry visits over a two-day period to gather information for the eSynchronist business retention and expansion program.
- TVA assisted the Community Development Partnership of Neshoba County in implementing the existing industry visitation program. The visits identified workforce availability trends and some opportunities for immediate assistance.
- TVA will administer Appalachian Regional Commission projects in Mississippi during fiscal 2005 that total nearly \$900,000 for infrastructure improvements, including work supporting the Skyline Steel project at Iuka.

NORTH CAROLINA

- The use of the TVA Reciprocating Constructed Wetlands (ReCip®) technology for decentralized wastewater treatment is growing in North Carolina. BioConcepts, the licensed agent for ReCip in the state, will use the technology to treat 40,000 gallons of wastewater per day from a residential development at Oriental. A contract to treat 60,000 gallons was implemented for Atlantic Beach in January. The technology is also being deployed overseas for a college in India.
- The visitor center was opened for the season at Fontana Dam to provide information about TVA and the river system.

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TENNESSEE

- The new Norris Dam Visitor Center was opened to serve the thousands of visitors who travel to the area each year.
- An open house was held at South Pittsburg High School to gather public input on a request from Thunder Enterprises to sell 578 acres of land on Nickajack Reservoir for a mixed-use residential and resort development in Marion County. The TVA Board will decide whether the land should be sold at public auction.
- The draft Environmental Impact Statement for an update of the 1988 Watts Bar Reservoir Land Management Plan was released for public review and comment.
- TVA treated 65 acres of nuisance aquatic plant growth near developed shoreline at Nickajack Reservoir and began mechanical harvesting to maintain boating access lanes. The aquatic plant management activities are conducted according to a plan developed by reservoir stakeholders.
- A Lake Watch Program was established at Chickamauga and Cherokee reservoirs in partnership with local law enforcement, citizens, and businesses to promote safer boating and other water-related initiatives.
- TVA approved a loan to support expansion of Natureplex in Memphis, which manufactures over-the-counter pharmaceuticals.
- TVA is helping more than 30 counties prepare five-year strategic economic development plans to enable them to qualify for the state's revised economic development readiness program.
- TVA is working with Warren and DeKalb counties, McMinnville Electric System, USDA, and state officials to design an existing business and industry program that can be adapted by all counties in the Upper Cumberland region.
- Funding was provided to the Northwest Tennessee Regional Port Authority to develop a general purpose port facility in Lake County to support regional industrial development.
- A Community Preparedness workshop for industrial development was conducted for leaders from Perry, Hickman, Stewart, Humphreys, and Lewis counties.
- TVA co-sponsored Chattanooga's annual Mayor's Business & Industry Appreciation Breakfast, which was attended by more than 500 business and civic leaders, including Congressman Wamp.
- The Center for the Advancement of Research, Technology, and Entrepreneurship opened to assist growth of technology-based businesses in Nashville. The center will participate in the TVA Business Incubation Network.

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of native plants were
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Teams to high school
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- Loudon County is participating in the TVA Consumer Connection program to promote retail and commercial growth.
- Site visits were conducted with executives of diverse firms in East and Middle Tennessee to increase awareness of resources available to them. Communities throughout West Tennessee also participated in a TVA “Proposing to Win” workshop to help them prepare competitive proposals for new businesses.
- TVA participated in the Tennessee Valley Homecoming reunion in Knoxville in June. An exhibit at the Knoxville Office Complex illustrates life in the Valley before and after electrification.
- More than 3,500 seedlings of native plants were distributed by Watershed Teams to high school students and landowners in Washington and Morgan counties for stream-bank stabilization projects to benefit Watts Bar and Douglas reservoirs.
- TVA supported the first Pickwick Challenge Offshore Powerboat Race on Pickwick Reservoir, where the world’s largest and fastest offshore powerboats competed.

VIRGINIA

- More than 50 county officials, town managers, planners, developers, and citizens attended two of four planned Tazewell County Growth Readiness Workshops. In addition to TVA, partners include the Southeast Watershed Forum, the U.S. Fish and Wildlife Service, and the town of Tazewell.